

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Claim Status

Claims 1-32 are pending. Claims 1, 11, 13, 23, 25, 26, and 27 are independent; the remaining claims depend, directly or indirectly, therefrom.

Office Action Summary

Claims 1-10, 13-22, and 25-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Agarwal (WO 2002/032985). Claims 11, 12, 23, 24, and 29-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Agarwal in view of Fuchs (US 2006/0167185). Claims 1 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kioka (US 4822840). Claims 2-10, 12, and 25-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kioka in view of Fuchs. Each of the rejections presented is based on the reasoning set forth in the previous Office Action.

Amendments to the Specification

Various portions of the Specification are amended to correct obvious typographical / spelling errors. No new matter is introduced by these amendments.

Amendments to the Claims

Claims 1 and 13 are amended to recite “less than” as opposed to “no more than” as supported in the Specification at paragraph [0030] (“always lower than”). Claims 1 and 13 are also amended to replace the optional language “may include” with the affirmative “includes,” and to define the fraction soluble in xylene at 20°C as being determined at a 5 day settling time, as supported in the Specification at Examples 10-15 and Table 3, among others. Claim 25 is amended to correct minor typographical errors. Claim 27 is amended to include a limitation similar to that in claim 1 regarding the xylene soluble fraction of the resulting polymer blend. No new matter is introduced by these amendments.

Rejections Under 35 U.S.C. 103(a)

Claims 1-10, 13-22, and 25-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Agarwal (WO 2002/032985). To the extent this rejection applies to the claims as amended, this rejection is respectfully traversed.

Claim 1 and 13 require, inter alia, that the propylene content of the second blend component be less than that of the first blend component, and that the polymer blend include a fraction soluble in xylene at 20°C, the xylene soluble fraction having a weight average molecular weight of more than 100 kg/mol and an intrinsic viscosity of above about 1.0 dl/g.

Agarwal, as admitted by the Examiner in the Office Action dated April 6, 2009 that Agarwal is silent regarding xylene soluble fractions and the properties of such fractions required by

claims 1 and 13. Claims 1 and 13 also require that the propylene content of component (b) be less than the propylene content of component (a); Agarwal, while overlapping, does not teach this additional restriction. As such, Agarwal fails to explicitly or implicitly disclose or suggest each and every limitation of claims 1 and 13.

With respect to polymer composition, the Examiner takes the position that where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists,” as based on *In re Wertheim*, 541 F.2d 257 (CCPA 1976). See page 3, number 9 of the Office Action dated December 8, 2009. With respect to the xylene soluble fraction limitation, the Examiner contends that such properties are necessarily present in the prior art. See page 5, number 13 of the Office Action dated December 8, 2009. With respect to properties of the polymer composition, the Examiner “takes the position that the properties of the prior art composition would necessarily be the same as claimed and inherently be not materially different from those of the claimed invention.” *Id.*

In paragraph [0008] of the present application, Applicant clearly describes a sub-genus of polymer compositions for which the present composition is directed – sealing layer grade polypropylene compositions. Agarwal, in contrast, is directed to the sub-genus of foamable polymer compositions. One skilled in the art would readily recognize that desired physical properties for foam grade polymer compositions and those for sealing layer grade polymer compositions are not identical. Even where polymers have similar melting points and/or melt flow rates, the remaining properties of the polymers cannot be presumed to be similar. As such, based on the totality of the disclosure in Agarwal, it cannot be shown that the compositions of Agarwal

necessarily have the same properties as the presently claimed composition. Agarwal thus does not inherently disclose each and every element required by claims 1 and 13, contrary to the Examiner's assertion.

Even if, assuming *arguendo*, Agarwal discloses a genus overlapping or encompassing the present claims, Agarwal, contrary to the Examiner's contention, fails to anticipate or render obvious the species or sub-genus required by claims 1 and 13. Applicant can rebut a presumption of obviousness based on a claimed invention...by showing...(2) that there are new and unexpected results relative to the prior art." *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317 (Fed. Cir. 2004). Further, "the law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims....In such a situation, the applicant must show that the particular range is critical...." *In re Woodruff*, 919 F.2d 1575 (Fed. Cir. 1990). Any evidence of unexpected results within the narrow range may also render the claims unobvious. See, e.g., *In re Woodruff*, 919 F.2d 1575 (Fed. Cir. 1990); see also MPEP §§ 2131.03(II) and 2144.05(III).

With regard to the composition of claims 1 and 13, Applicant has defined by components (a) and (b), and the required xylene soluble fraction of the resulting admixture, a sub-genus or species having unexpected and beneficial properties not present in all members of the sub-genus disclosed by Agarwal. Compositions meeting the requirements defined by (a) and (b), and with the xylene soluble fraction requirement, as shown by the numerous examples presented in the application, have beneficial Seal Initiation Temperatures (SIT), low hexane solubles, and excellent mechanical properties as compared to other seal grade polymer compositions, among other

advantageous properties (see paragraphs [0023]-[0026] and the Examples, among others). These new and unexpected results are neither disclosed nor suggested in Agarwal.

These new and unexpected results are clearly illustrated in the Examples. Examples 10-15 (metallocene) of the present application and Comparative Examples 31 (Ziegler-Natta), and 41-42 (metallocene) of the present disclosure include compositions meeting both limitations (a) and (b) of the present claims. The blends in the Comparative Examples do not meet the xylene soluble fraction properties required by claim 1 and present in Examples 10-15 and the respective Examples analyzing the other physical properties for the samples indicate a clear difference in other physical properties. The Examples thus clearly show that the sub-genus or species as required by claims 1 and 13, including the limitation for the xylene soluble fraction, have unexpected and advantageous properties over both the genus disclosed at paragraph [0008] in the present specification and over the purported genus or sub-genus disclosed in Agarwal, directed toward foam grade polymers.

As noted above, the Examiner "takes the position that the properties of the prior art composition would necessarily be the same as claimed and inherently be not materially different from those of the claimed invention." See page 5, number 13 of the Office Action dated December 8, 2009. As shown by the Examples in the present application and the arguments above, this is clearly incorrect. Accordingly, the Examiner's rejection as based on inherency must fail.

Applicant has also shown that the claimed range achieves unexpected results relative to the prior art genus or sub-genus of Agarwal, and has clearly rebutted the *prima facie* case of

obviousness in view of Agarwal. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 1 and 13 in view of Agarwal.

Claims dependent from claims 1 and 13, including claims 2-10 and 14-22 are likewise not disclosed in or obvious in view of Agarwal. Accordingly, withdrawal of the rejection of claims 2-10 and 14-22 is respectfully requested.

Claims 25 and 26 are directed toward polymer blend compositions, and claim 27 is directed to a process for forming a polymer blend, and each includes limitations similar to those discussed above with respect to claims 1 and 13. Thus, claims 25-27 are likewise not disclosed in or obvious in view of Agarwal. Accordingly, withdrawal of the rejection of claims 25-27, and dependent claim 28 is respectfully requested.

Claims 11, 12, 23, 24, and 29-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Agarwal in view of Fuchs (US 2006/0167185). To the extent this rejection applies to the claims as amended, this rejection is respectfully traversed.

Claims 11, 12, 23, 24, and 29-32 depend from independent claims 1, 13, and 27. As shown by the Arguments above, Agarwal fails to disclose or suggest each and every element of claims 1, 13, and 27. Fuchs does not provide that which Agarwal lacks. Accordingly, withdrawal of the rejection of claims 11, 12, 23, 24, and 29-32 over Agarwal in view of Fuchs is respectfully requested.

Claims 1 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kioka (US 4822840). To the extent this rejection applies to the claims as amended, this rejection is respectfully traversed.

Kioka is discloses a low crystalline propylene random copolymer composition. See Kioka, Abstract.

Similar to Agarwal, Kioka is directed toward a very broad genus or sub-genus of polymer compositions. The second component in Kioka may range from 10% to 90% in propylene content (see Kioka at the Claims and Summary, among others), which is far removed from the second component required by the present claims. Further, Kioka fails to disclose or suggest that the propylene content of the second component be less than that of the first component, or that the composition have the required properties for the xylene soluble fraction.

The arguments above directed toward Agarwal similarly apply to Kioka. The properties required by claim 1 and not disclosed or suggested in Kioka cannot be shown to be inherent in Kioka, and the new and surprising results for the claimed compositions clearly distinguish the sub-genus or species of claim 1 over that of Kioka. Accordingly, withdrawal of the rejection of claim 1 and dependent claim 11 is respectfully requested.

Claims 2-10, 12, and 25-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kioka in view of Fuchs. To the extent this rejection applies to the claims as amended, this rejection is respectfully traversed.

Claims 2-10 and 12 depend from independent claim 1. As shown by the Arguments above, Kioka fails to expressly or inherently disclose or suggest each and every element of claim 1. Fuchs does not provide that which Kioka lacks. Accordingly, withdrawal of the rejection of claims 2-10 and 12 over Kioka in view of Fuchs is respectfully requested.

Claim 25 includes limitations similar to those discussed above with respect to claim 1. Thus, claims 25-32 are likewise not disclose in or obvious in view of Kioka and Fuchs. Accordingly, withdrawal of the rejection of claims 25-32 is respectfully requested.

Consideration of References / Information Disclosure Statement


In the previous response, Applicant supplied the Foreign Patent Documents not submitted with the IDS filed on November 2, 2005, and specifically requested their consideration. With this response, Applicant submits another IDS listing these references. As these references were previously submitted, they are not included with the present listing of foreign patent documents for consideration. Applicant requests that the Examiner consider these references and indicate to Applicant that such references were considered.

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17488/055002).

Dated: February 11, 2010

Respectfully submitted,

By



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